



**Air Quality
TIER II OPERATING PERMIT
and
PERMIT TO CONSTRUCT**

**State of Idaho
Department of Environmental Quality**

PERMIT NO.: T2-060510

FACILITY ID NO.: 033-00002

AQCR: 61

CLASS: A

SIC: 2034

ZONE: 12

UTM COORDINATE (km): 402.4 , 4881.8

1. PERMITTEE

RDO Processing, LLC

2. PROJECT

Tier II Operating Permit and Permit to Construct Modification

3. MAILING ADDRESS

P. O. Box 265

CITY

Dubois

STATE

ID

ZIP

83423-0265

4. FACILITY CONTACT

Jan Nel

TITLE

Plant Manager

TELEPHONE

(208) 374-5600

5. RESPONSIBLE OFFICIAL

Jan Nel

TITLE

Plant Manager

TELEPHONE

(208) 374-5600

6. EXACT PLANT LOCATION

72 Dehigh Road, Dubois, Idaho 83423 (~6 miles south of Dubois)
Northeast ¼ of Section 28, Township 9 North, Range 36 East

COUNTY

Clark

7. GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS

Potato Dehydration

8. PERMIT AUTHORITY

This permit to construct and Tier II operating permit is issued according to the Rules for the Control of Air Pollution in Idaho, IDAPA 58.01.01.200-228 and IDAPA 58.01.01.400-470, respectively. This permit pertains only to emissions of air contaminants, which are regulated by the state of Idaho and to the sources specifically allowed to be operated by this permit.

Only the terms and conditions pertaining to Tier II operating permit requirements are subject to the expiration date of this permit.

The permit to construct conditions in this permit will expire if construction has not begun within two years of its issue date or if construction is suspended for one year.

This permit has been granted on the basis of design information presented in the application and the Idaho Department of Environmental Quality's (DEQ) technical analysis of the supplied information. Changes in design or equipment that result in any change in the nature or amount of emissions may be considered a modification. Modifications are subject to DEQ review in accordance with IDAPA 58.01.01.200 of the Rules for the Control of Air Pollution in Idaho.

CHERYL A. ROBINSON, P.E., PERMIT WRITER
DEPARTMENT OF ENVIRONMENTAL QUALITY

MIKE SIMON, STATIONARY SOURCE PROGRAM MANAGER
DEPARTMENT OF ENVIRONMENTAL QUALITY

DATE ISSUED:

June 2, 2004

DATE MODIFIED/REVISED:

PUBLIC COMMENT

DATE EXPIRES:

June 2, 2009

Table of Contents

LIST OF ACRONYMS, UNITS, AND CHEMICAL NOMENCLATURE	3
1. PERMIT SCOPE.....	4
2. FACILITY-WIDE CONDITIONS	8
3. BOILER NO. 1, NEBRASKA D-SERIES BOILER	11
4. BOILER NO. 2, SUPERIOR BOILER WORKS	22
5. DRYER PROCESSES AND MATERIAL TRANSFER SYSTEMS.....	23
6. SUMMARY OF EMISSION RATE LIMITS	26
7. PERMIT TO CONSTRUCT AND TIER II PERMIT TO OPERATE GENERAL PROVISIONS	27

List of Acronyms, Units, and Chemical Nomenclature

acfm	actual cubic feet per minute
AFS	AIRS Facility Subsystem
AIRS	Aerometric Information Retrieval System
AQCR	Air Quality Control Region
ASTM	American Society for Testing and Materials
CFR	Code of Federal Regulations
CO	carbon monoxide
DEQ	Department of Environmental Quality
EPA	Environmental Protection Agency
gr/dscf	grain (1 lb = 7,000 grains) per dry standard cubic foot
IDAPA	A numbering designation for all administrative rules in Idaho promulgated in accordance with the Idaho Administrative Procedures Act
km	kilometer
lb/hr	pound per hour
m	meter(s)
MMBtu	million British thermal units
ng/J	nanograms per Joule
NO ₂	nitrogen dioxide
NO _x	nitrogen oxides
NSPS	New Source Performance Standards
PM	Particulate Matter
PM ₁₀	Particulate Matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers
ppm	parts per million
PTC	Permit to Construct
Rules	Rules for the Control of Air Pollution in Idaho
scf	standard cubic feet
SIC	Standard Industrial Classification
SO ₂	sulfur dioxide
SO _x	sulfur oxides
T/yr	tons per any consecutive 12-month period
µg/m ³	micrograms per cubic meter
UTM	Universal Transverse Mercator
VOC	volatile organic compound

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: T2-060510**Permittee:** RDO Processing, LLC**Location:** Dubois, Idaho**Facility ID No.:** 033-00002**1. PERMIT SCOPE*****Purpose***

1.1 The purpose of this Tier II operating permit and permit to construct (PTC) is to:

- Permit the following changes for Boiler No. 1:
 - Increase the rated capacity from 99 MMBtu/hr (subject to NSPS Subpart Dc) to 150 MMBtu/hr (subject to NSPS Subpart Db). Reinstate permit T2-050511 conditions associated with NSPS Subpart Db (conditions 3.4 – 3.12, 3.14, 3.16, 3.17, 3.19, 3.20- 3.28, and 3.30 – 3.39, with changes as needed for a unit modified after February 25, 2005, which were replaced through Item No. 4 of Case No. E-060001 Consent Order (Consent Order), issued February 8, 2006 by applicable Subpart Dc conditions.
 - Increase the permitted daily maximum residual fuel oil consumption in this boiler from 17,748 gallons to 24,984 gallons,
 - Increase the permitted maximum annual residual fuel oil consumption from 5,176,536 gallons to 9,119,160 gallons, and
 - Include biodiesel as an approved fuel type for use in the boiler.
- Reflect the installation of a scrubber with a venturi on Boiler No. 1 to control SO₂ and PM/PM₁₀ emissions.
- Permit a third 30,000-gallon fuel oil storage tank.
- Incorporate the following conditions for Boiler No. 1 specified in the Consent Order:
 - Item (e). Replace the exclusive use of very low sulfur fuel oil (i.e., less than 0.3% by weight) with ASTM Grades 1 through 6 fuel oil that meet IDAPA rules for sulfur content (i.e., maximum residual fuel oil sulfur content of 1.75% by weight).
- Replace throughput limitations specified in the Consent Order for the Flaker Drum Dryers, National Dryer, and Fluidized Bed Dryer intended to keep PM₁₀ emissions below 100 tons per year (T/yr) with the modeled emission rates.

1.2 This Tier II and PTC replaces Tier II operating permit No. T2-050511, issued January 13, 2006, and operating conditions specified in Case No. E-060001 Consent Order, issued February 8, 2006, the terms and conditions of which no longer apply.

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: T2-060510

Permittee:	RDO Processing, LLC	Facility ID No.: 033-00002
Location:	Dubois, Idaho	

Regulated Sources

1.3 Table 1.1 lists all sources of regulated emissions in this permit.

Table 1.1 SUMMARY OF REGULATED SOURCES

Permit Section	Source Description	Emissions Control(s)
2	<u>Fuel Oil Storage Tanks: Nos. 1, 2, and 3</u> Capacity: 30,000 gallons each Type: Vertical, fixed roof Size: Shell Height 26 ft, Diameter 14 ft Paint: White painted shell and dome roof	None, No Stacks
2	<u>Propane Heaters: Nos. 1, 2, and 3</u> Manufacturer: Maxon Model: SC Burner Type: Horizontally-fired, 100% space heating Rating: 1.2 MMBtu/hr Fuels: propane, natural gas	None <u>REC 1</u> Stack Height: 35.38 feet <u>REC 2</u> Stack Height: 34.58 feet <u>REC 3</u> Stack Height: 35.58 feet <u>REC 1, REC 2, and REC 3:</u> All stacks are vertical, with cap Stack Exit Diameter: 0.4 feet Exhaust Flow Rate: 0.025 acfm Exit Gas Temperature: 90°F
3	<u>Boiler No. 1</u> Manufacturer: Nebraska Boiler Manufacture Date: 1996 Modified: after Feb 28, 2005 Model: NS-F-89-ECON, Serial No. D-3465 Burner Type: Horizontally-fired, Low NO _x burner Rating: 150 MMBtu/hr Heat Release Rate: 73,400 Btu/hr-ft ³ Fuels/Max Usage: ASTM Grades 1-6 fuel oil (max 1.75% S): 1,041 gal/hr, 9.12E6 gal/yr Propane: 1,596 gal/hr, 1.4E07 gal/yr Natural Gas	<u>Lime Slurry Scrubber with venturi</u> Mfr: Innovative Scrubber Solutions, Inc. Efficiency: 92% for SO ₂ Mfr Guarantee: 0.03 lb/MMBtu for PM ₁₀ <u>BOILER NO. 1 Stack:</u> Stack Height: 45 feet Stack Exit Diameter: 6.65 feet Exhaust Flow Rate: 43,453 acfm Exit Gas Temperature: 123°F
4	<u>Boiler No. 2</u> Manufacturer: Superior Boiler Works Model: 6-5-100-S150-GP Burner Type: Horizontally-fired Rating: 6.7 MMBtu/hr Fuels: Propane, natural gas Fuel Usage: max. 6,381 scf/hr, 55.9 MMscf/year	None <u>BOILER NO. 2 Stack:</u> Stack Height: 41.42 feet Stack Exit Diameter: 1.66 feet Exhaust Flow Rate: 2,880 acfm Exit Gas Temperature: 355°F
5	<u>Fluidized Bed Dryer</u> Manufacturer: Maxon Model: Ovenpak 400, Size 415H Burner Type: Horizontally-fired Rating: 4.5 MMBtu/hr Fuels/Max Usage: Propane, natural gas Feed Material: Potatoes Process Rated Capacity: 2,000 lb/hr	None <u>FLD DYR Stack:</u> Stack Height: 39.42 feet Horizontal discharge Stack Diameter: 1.92 ft ^a Modeled: Stack Exit Diameter: 0.0033 feet Exhaust Flow Rate: 1.7E-06 acfm Exit Gas Temperature: 110°F

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: T2-060510

Permittee: RDO Processing, LLC

Location: Dubois, Idaho

Facility ID No.: 033-00002

Table 1.1 SUMMARY OF REGULATED SOURCES

Permit Section	Source Description	Emissions Control(s)
5	<u>Multi-Stage Belt-type Dryer, Stage A (Stacks A1 and A2)</u> Manufacturer: National Dryer Model: Eclipse 200 AM Burner Type: Horizontally-fired Rating: 3.6 MMBtu/hr Fuels: propane, natural gas Feed Material: Potatoes Process Rated Capacity: 1,500 lb/hr	None <u>NAT A1 Stack:</u> Stack Height: 46 feet, no cap Vertical discharge Stack Diameter: 2.68 ft ^a Modeled: Stack Exit Diameter: 0.0033 feet Exhaust Flow Rate: 1.7E-06 acfm Exit Gas Temperature: 150°F <u>NAT A2 Stack:</u> Stack Height: 46 feet, no cap Vertical discharge Modeled: Stack Exit Diameter: 0.0033 feet Exhaust Flow Rate: 1.7E-06 acfm Exit Gas Temperature: 176°F
5	<u>Multi-Stage Belt-type Dryer, Stage B</u> Manufacturer: National Dryer Model: Eclipse 160 AM Burner Type: Horizontally-fired Rating: 3.6 MMBtu/hr Fuels: propane, natural gas Feed Material: Potatoes Process Rated Capacity: 1,500 lb/hr	None <u>NAT B Stack:</u> Stack Height: 46 feet, no cap Vertical discharge Stack Exit Diameter: 0.0033 feet Exhaust Flow Rate: 1.7E-06 acfm Exit Gas Temperature: 167°F
5	<u>Multi-Stage Belt-type Dryer, Stage C</u> Manufacturer: National Dryer Model: Eclipse 160 AM Burner Type: Horizontally-fired Rating: 3.6 MMBtu/hr Fuels: propane, natural gas Feed Material: Potatoes Process Rated Capacity: 1,500 lb/hr	None <u>NAT C Stack:</u> Stack Height: 46 feet, no cap Vertical discharge Modeled: Stack Exit Diameter: 0.0033 feet Exhaust Flow Rate: 1.7E-06 acfm Exit Gas Temperature: 148°F
5	<u>Flaker Drum Dryers, Nos. 1-12 (Dehydrators)</u> Manufacturer: Various Model: Various Feed Material: Potatoes Rated Capacity: 90,000 lb/hr	None <u>DRUM1 through DRUM12 Stacks:</u> Stack Height: 45.58 feet, with cap Vertical discharge Stack Exit Diameter: 3.58 feet Modeled Flow Rate: 0.0033 ft/sec Exit Gas Temperature: 125°F
5	<u>Flake Packaging Bulk Line</u> Manufacturer: Various Model: Various Feed Material: Potato Flakes Rated Capacity: 12,000 lb/hr	<u>Primary: Cyclone:</u> Mfr: Idaho Steel Efficiency: 90% <u>Secondary: Baghouse:</u> Mfr: Micropulsair Model: #25-S-8-30-C Efficiency: 99% <u>FP BULK Stack:</u> Stack Height: 38.75 feet Stack Exit Diameter: 0.33 feet Exhaust Flow Rate: 1,675 acfm Exit Gas Temperature: 68°F (ambient)

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: T2-060510

Permittee:	RDO Processing, LLC	Facility ID No.: 033-00002
Location:	Dubois, Idaho	

Table 1.1 SUMMARY OF REGULATED SOURCES

Permit Section	Source Description	Emissions Control(s)
5	<u>Flake Packaging Line</u> Manufacturer: Various Model: Various Feed Material: Potato Flakes Rated Capacity: 8,000 lb/hr	<u>Primary: Cyclone:</u> Mfr: Idaho Steel Efficiency: 90% <u>Secondary: Baghouse:</u> Mfr: Micropulsair Model: #12-8-160C Efficiency: 99% <u>FP Stack:</u> Stack Height: 39.59 feet Stack Exit Diameter: 4 feet Exhaust Flow Rate: 14,024 acfm Exit Gas Temperature: 68°F (ambient)
5	<u>Flake Packaging Torit Line</u> Manufacturer: Various Model: Various Feed Material: Potato Flakes Rated Capacity: 8,000 lb/hr	<u>Baghouse:</u> Mfr: Torit Model: TD-162 Efficiency: 99% <u>FP TOR Stack:</u> Stack Height: 33.92 feet, with cap Vertical discharge Stack Exit Diameter: 0.25 feet Modeled Flow Rate: 9.7E-03 acfm Exit Gas Temperature: 68°F (ambient)
5	<u>Flake Packaging Drum Negative Air Baghouse</u> Process Feed Material: Potato Flakes Rated Capacity: 18,000 lb/hr Process Equipment or Air Pollution Control Equipment: Process equipment (product recovery) <u>Primary: Cyclone:</u> Mfr: Idaho Steel Efficiency: 90% <u>Secondary: Baghouse:</u> Mfr: Nol-Tech Systems Model: 238 Efficiency: 99%	<u>FP BH Stack:</u> Stack Height: 37.42 feet Stack Exit Diameter: 1.53 feet Exhaust Flow Rate: 12,000 acfm Exit Gas Temperature: 68°F (ambient)
5	<u>Tote Dump Station Cyclone</u> Manufacturer: Custom-made Feed Material: Agglomerated potato flake Process Throughput: 1,750 lb/hr Process Equipment or Air Pollution Control Equipment: Process equipment (product recovery)	<u>CYCLONE Stack:</u> Stack Height: 44.08 feet, Non-vertical discharge Modeled: Stack Exit Diameter: 0.0033 feet Exhaust Flow Rate: 1.7E-06 acfm Exit Gas Temperature: 68°F (ambient)

^a Exit diameters and flow rates given in application are the modeled values, which used DEQ guidance default velocities and diameters to account for the presence of a cap (for the Drum Dryers) and modeling the vertical National Dryer stacks as horizontal releases. Actual stack diameters shown were calculated from stack areas given in the December 23, 2004 source test report.

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: T2-060510

Permittee: RDO Processing, LLC

Location: Dubois, Idaho

Facility ID No.: 033-00002

2. FACILITY-WIDE CONDITIONS

Fugitive Emissions

- 2.1 All reasonable precautions shall be taken to prevent PM from becoming airborne in accordance with IDAPA 58.01.01.650-651. In determining what is reasonable, considerations will be given to factors such as the proximity of dust-emitting operations to human habitations and/or activities and atmospheric conditions that might affect the movement of particulate matter. Some of the reasonable precautions include, but are not limited to, the following:
- Use, where practical, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads, or the clearing of lands.
 - Application, where practical, of asphalt, oil, water, or suitable chemicals to, or covering of, dirt roads, material stockpiles, and other surfaces which can create dust.
 - Installation and use, where practical, of hoods, fans, and fabric filters or equivalent systems to enclose and vent the handling of dusty materials. Adequate containment methods should be employed during sandblasting or other operations.
 - Covering, where practical, of open-bodied trucks transporting materials likely to give rise to airborne dusts.
 - Paving of roadways and their maintenance in a clean condition, where practical.
 - Prompt removal of earth or other stored material from streets, where practical.
- 2.2 The permittee shall monitor and maintain records of the frequency and the method(s) used (i.e., water, chemical dust suppressants, etc.) to reasonably control fugitive emissions.
- 2.3 The permittee shall maintain records of all fugitive dust complaints received. The permittee shall take appropriate corrective action as expeditiously as practicable after receipt of a valid complaint. The records shall include, at a minimum, the date that each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.
- 2.4 The permittee shall conduct a monthly facility-wide inspection of potential sources of fugitive emissions, during daylight hours and under normal operating conditions to ensure that the methods used to reasonably control fugitive emissions are effective. If fugitive emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable. The permittee shall maintain records of the results of each fugitive emissions inspection. The records shall include, at a minimum, the date of each inspection and a description of the following: the permittee's assessment of the conditions existing at the time fugitive emissions were present (if observed), any corrective action taken in response to the fugitive emissions, and the date the corrective action was taken.

Odors

- 2.5 The permittee shall not allow, suffer, cause, or permit the emission of odorous gases, liquids, or solids to the atmosphere in such quantities as to cause air pollution in accordance with IDAPA 58.01.01.775-776.

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: T2-060510**Permittee:** RDO Processing, LLC**Location:** Dubois, Idaho**Facility ID No.:** 033-00002

- 2.6 The permittee shall maintain records of all odor complaints received. If the complaint has merit, the permittee shall take appropriate corrective action as expeditiously as practicable. The records shall, at a minimum, include the date that each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.

Visible Emissions

- 2.7 The permittee shall not discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625. These provisions shall not apply when the presence of uncombined water, NO_x, and/or chlorine gas is the only reason for the failure of the emission to comply with the requirements of this section.
- 2.8 The permittee shall conduct a monthly facility-wide inspection of potential sources of visible emissions, during daylight hours and under normal operating conditions. The visible emissions inspection shall consist of a see/no see evaluation for each potential source. If any visible emissions are present from any point of emission, the permittee shall either take appropriate corrective action as expeditiously as practicable, or perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is greater than 20% for a period or periods aggregating more than three minutes in any 60-minute period, the permittee shall take all necessary corrective action and report the exceedance in accordance with IDAPA 58.01.01.130-136. The permittee shall maintain records of the results of each visible emissions inspection and each opacity test when conducted. The records shall include, at a minimum, the date and results of each inspection and test and a description of the following: the permittee's assessment of the conditions existing at the time visible emissions are present (if observed), any corrective action taken in response to the visible emissions, and the date corrective action was taken.

Open Burning

- 2.9 The permittee shall comply with the requirements of IDAPA 58.01.01.600-616, Rules for Control of Open Burning.

Reports and Certifications

- 2.10 Any reporting required by this permit, including but not limited to, records, monitoring data, supporting information, requests for confidential treatment, notification of intent to test, testing reports, or compliance certifications, shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete. Any reporting required by this permit shall be submitted to the following address:

Air Quality Permit Compliance
Department of Environmental Quality
Idaho Falls Regional Office
900 N. Skyline, Suite B
Idaho Falls, ID 83402
Phone: (208) 528-2650
Fax: (208) 528-2695

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: T2-060510

Permittee: RDO Processing, LLC

Location: Dubois, Idaho

Facility ID No.: 033-00002

Fuel-burning Equipment

- 2.11 The permittee shall not discharge to the atmosphere from any fuel-burning equipment PM in excess of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume for gas, 0.050 gr/dscf of effluent gas corrected to 3% oxygen by volume for liquid, 0.050 gr/dscf of effluent gas corrected to 8% oxygen by volume for coal, and 0.080 gr/dscf of effluent gas corrected to 8% oxygen by volume for wood products.

Sulfur Content

- 2.12 The permittee shall not sell, distribute, use, or make available for use any fuel oil containing more than the following percentages of sulfur:

- ASTM Grade 1 fuel oil - 0.3% by weight.
- ASTM Grade 2 fuel oil - 0.5% by weight.
- Residual fuel oil (ASTM Grades 4, 5, and 6) – 1.75% by weight.

- 2.13 The permittee shall maintain documentation of verification of fuel oil sulfur content on an as-received basis. For each shipment of fuel oil received, the permittee shall either obtain samples and a laboratory analysis, or obtain and maintain at the facility fuel receipts from the fuel supplier.

[PTC Condition, Proposed]

NSPS Subpart Kb - Fuel Oil Storage Tanks

- 2.14 The permittee shall keep readily accessible records showing the dimensions and an analysis of the capacity of the three 30,000 gallon fuel oil storage tanks utilized at the facility in accordance with 40 CFR 60.116b(b).

[Proposed]

Control of Property within the Ambient Air Boundary

- 2.15 The permittee shall maintain exclusive access control over all properties within the modeled ambient air boundary shown in Figure 2-2 of RDO's PTC/Tier II permit application received by DEQ on May 5, 2006, and as described in Exhibit A-1 of the Custom Farming Agreement executed between RDO and BLF Land, LLC, effective on January 18, 2006, as amended on February 25, 2006. Access controls shall include posting and maintaining No Trespassing signs at the boundaries.

[Proposed]

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: T2-060510**Permittee:** RDO Processing, LLC**Location:** Dubois, Idaho**Facility ID No.:** 033-00002**3. BOILER NO. 1, NEBRASKA D-SERIES BOILER****3.1 Process Description**

A 150 MMBtu/hr Nebraska Boiler (Boiler No. 1) produces steam for the production of dehydrated potato products which includes steam peeling, blanching, cooking and drying operations. Boiler No. 1 utilizes a low-NO_x burner to reduce NO_x emissions and it is an affected facility under the New Source Performance Standards (NSPS) of 40 CFR Part 60 Subpart Db. Boiler No. 1 may combust propane, natural gas, biodiesel meeting the specifications of ASTM D6751, or any ASTM grade of fuel oil containing no more than 1.75 weight percent sulfur.

[Proposed]***Emissions Limits*****3.2 SO₂ Emission Limit**

Emissions of sulfur dioxide (SO₂) from Boiler No. 1 shall not exceed 549 pounds per day.

[PTC Condition, Proposed]**3.3 PM₁₀ Emission Limit**

Emissions of particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM₁₀) from Boiler No. 1 shall not exceed 108 pounds per day.

[PTC Condition, Proposed]**3.4 SO₂ Emission Limit - NSPS**

Except as provided in 40 CFR 60.42b(j), and in accordance with 40 CFR 60.42b(a), on and after the date on which the performance test is completed or required to be completed under 40 CFR 60.8, whichever date comes first, the permittee shall not cause to be discharged into the atmosphere any gases that contain sulfur dioxide in excess of:

- 0.20 lb/MMBtu (87 ng/J), or
- Eight percent (0.08) of the potential SO₂ emission rate (92 percent reduction) and the emission limit of 1.2 lb/MMBtu heat input.

[PTC Condition, Proposed]

3.5 Compliance with the emission limits, fuel oil sulfur limits, and/or percent reduction requirements under this section shall be determined on a 30-day rolling average basis in accordance with 40 CFR 60.42b(e).

[PTC Condition]

3.6 The sulfur dioxide emission rate limit under 40 CFR 60.42b applies at all times, including periods of startup, shutdown, and malfunction in accordance with 40 CFR 60.42b(g).

[PTC Condition]

3.7 Percent reduction requirements are not applicable to affected facilities combusting only very low sulfur oil in accordance with 40 CFR 60.42b(j).

[PTC Condition]

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: T2-060510**Permittee:** RDO Processing, LLC**Location:** Dubois, Idaho**Facility ID No.:** 033-00002**3.8 Particulate Matter (PM) Emission Limit - NSPS**

On and after the date on which the performance test is completed or is required to be completed under 40 CFR 60.8, whichever date comes first, the permittee shall not cause to be discharged into the atmosphere any gases that contain particulate matter emissions in excess of the following in accordance with 60.43b(h)(1) or (h)(2):

- 0.030 lb/MMBtu (13 ng/J), or
- 0.051 lb/MMBtu (22 ng/J) and 0.2 percent of the combustion concentration (99.8 percent reduction).
[PTC Condition, Proposed]

3.9 NO_x Emission Limit - NSPS

On and after the date on which the initial performance test is completed or is required to be completed under 40 CFR 60.8, whichever date comes first, no owner or operator of an affected facility that is subject to the provisions of this section and that combusts only oil or natural gas shall cause to be discharged into the atmosphere from that affected facility any gases that contain nitrogen oxides (expressed as NO₂) in excess of the following emission limits in accordance with 60.44b(a):

(1) Natural gas and distillate oil:

(ii) High heat release rate.....0.20 lb/MMBtu (86 ng/J) heat input

(2) Residual oil:

(ii) High heat release rate.....0.40 lb/MMBtu (170 ng/J) heat input

[PTC Condition]

- 3.10 For purposes of 40 CFR 60.44b(i), the nitrogen oxide standards under this section apply at all times including periods of startup, shutdown, or malfunction in accordance with 40 CFR 60.44b(h).

[PTC Condition]

- 3.11 Compliance with the NO_x emission limits under this section shall be determined on a 30-day rolling average basis in accordance with 40 CFR 60.44b(i).

[PTC Condition]**3.12 Opacity - NSPS**

On and after the date on which the performance test is completed or required to be completed under 40 CFR 60.8, whichever date comes first, the permittee shall not cause to be discharged into the atmosphere any gases that exhibit greater than 20% opacity (six-minute average), except for one six-minute period per hour of not more than 27% opacity in accordance with 40 CFR 60.43b(f). This opacity standard applies at all times, except during periods of startup, shutdown, and malfunction in accordance with 40 CFR 60.43b(g). This opacity standard only applies when fuel oil is fired in the boiler and it does not apply when Boiler No. 1 is fired using natural gas and propane.

[PTC Condition]

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: T2-060510

Permittee: RDO Processing, LLC

Location: Dubois, Idaho

Facility ID No.: 033-00002

Operating Requirements

3.13 Fuel Types

3.13.1 The permittee may combust in Boiler No. 1 only natural gas, propane, S500 Grade biodiesel meeting the specifications of ASTM D6751, and ASTM Grades 1-6 fuel oil, including *very low sulfur oil*.
[PTC Condition, Proposed]

3.13.2 In accordance with 40 CFR 60.42b(i), when the SO₂ control system is not being operated because of malfunction or maintenance of the SO₂ control system, Boiler No. 1 may be operated using only natural gas, propane, or *very low sulfur oil*, which is defined in this case as an oil with a sulfur dioxide emission rate equal to or less than 140 ng/J (0.32 lb/MMBtu) heat input.
[PTC Condition, Proposed]

3.14 Fuel Oil Throughput

The maximum quantity of fuel combusted in Boiler No. 1 shall not exceed any of the following:

- Biodiesel and ASTM Grades 1 through 6 Fuel Oils: 24,984 gallons per calendar day.
[PTC Condition, Proposed]

3.15 Fuel Oil Sulfur and Nickel Content

3.15.1 The sulfur content of the fuel oil combusted in Boiler No. 1 shall contain no more than 1.75% sulfur by weight, and shall contain no more than 1.67E-06 pounds of nickel by weight per 1000 gallons.
[PTC Condition, Proposed]

3.15.2 *Very low sulfur oil* used in Boiler No. 1 shall contain no more than 0.3 weight percent sulfur, or when combusted without SO₂ emission control, shall have an SO₂ emission rate equal to or less than 140 ng/J (0.32 lb/MMBtu).
[PTC Condition, Proposed]

Monitoring and Recordkeeping Requirements

3.16 Very Low Sulfur Fuel Oil Demonstration/Fuel Receipts - NSPS

In accordance with 40 CFR 60.42b(j), the owner or operator of an affected facility combusting very low sulfur oil shall demonstrate that the oil meets the definition of very low sulfur oil by:

- (1) Following the performance testing procedures as described in 40 CFR 60.45b(c) or 60.45b(d), and following the monitoring procedures as described in 40 CFR 60.47b(a) or 60.47b(b) to determine sulfur dioxide emission rate or fuel oil sulfur content; or
- (2) Maintaining fuel receipts in accordance with 40 CFR 60.49b(r) and as specified by the EPA. The owner or operator of an affected facility who elects to demonstrate that the affected facility combusts only very low sulfur oil under 40 CFR 60.42b(j)(2) shall obtain and maintain at the affected facility fuel receipts from the fuel supplier which certify that the oil meets the definition of distillate oil as defined in 40 CFR 60.41b.

[PTC Condition, Proposed]

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: T2-060510**Permittee:** RDO Processing, LLC**Location:** Dubois, Idaho**Facility ID No.:** 033-00002**3.17 Residual Oil Nitrogen Content Records - NSPS**

For an affected facility that combusts residual oil and meets the criteria under 40 CFR 60.46b(e)(4), the owner or operator shall maintain records of the nitrogen content of the residual oil combusted in the affected facility and calculate the average fuel nitrogen content for the reporting period. The nitrogen content shall be determined using ASTM Method D3431-80, Test Method for Trace Nitrogen in Liquid Petroleum Hydrocarbons (IBR - see 40 CFR 60.17), or fuel suppliers. If residual oil blends are being combusted, fuel nitrogen specifications may be prorated based on the ratio of residual oils of different nitrogen content in the fuel blend.

[PTC Condition]**3.18 All Fuel Oils – Fuel Receipts**

For each shipment of fuel oil received, the permittee shall either obtain samples and a laboratory analysis, or obtain and maintain at the facility fuel receipts from the fuel supplier, which demonstrate that any fuel oil received complies with:

- The fuel sulfur content limits specified in Permit Condition 2.13,
- The fuel sulfur content limits for S500 Grade biodiesel, as specified in ASTM D6751, and
- The fuel nickel content limit specified in Permit Condition 3.15.

[PTC Condition, Proposed]**3.19 Fuel Combustion Records - NSPS**

The owner or operator of an affected facility shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for distillate oil, residual oil, and natural gas for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month in accordance with 40 CFR 60.49b(d).

[PTC Condition]**3.20 Emission Monitoring for SO₂ - NSPS**

- 3.20.1 In accordance with 40 CFR 60.47b(f), the owner or operator of an affected facility that combusts very low sulfur oil is not subject to the emission monitoring requirements of 40 CFR 60.47b if the owner or operator obtains fuel receipts, as described in 40 CFR 60.49b(r) and as specified by the EPA. Otherwise, the permittee shall comply with the emission monitoring requirements for SO₂ as required by 40 CFR 60.47b.

[PTC Condition]

- 3.20.2 When combusting fuel oil other than very low sulfur oil, the owner or operator shall comply with (1), (2), or (3) below:

- (1) In accordance with 40 CFR 60.47b(a), install, calibrate, maintain, and operate continuous emission monitoring system (CEMS) for measuring SO₂ concentrations and either oxygen (O₂) or carbon dioxide (CO₂) concentrations, and shall record the output of the CEMS, and
 - a. The O₂ or CO₂ concentrations shall be monitored at both the inlet and outlet of the SO₂ control device, and

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: T2-060510**Permittee:** RDO Processing, LLC**Location:** Dubois, Idaho**Facility ID No.:** 033-00002

b. Emission data shall be obtained in accordance with 60.47b(c), (d), and (e).

(2) Use the alternative method specified in 40 CFR 60.47b(b).

(3) Use an alternative method approved by the EPA per 60.13(h)(i)(1).

[PTC Condition, Proposed]

3.21 Emission Monitoring for PM - NSPS

3.21.1 In accordance with 40 CFR 60.48b(j), the owner or operator of an affected facility that combusts very low sulfur oil or liquid or gaseous fuels with potential SO₂ emission rates of 140 ng/J (0.32 lb/MMBtu) heat input or less is not subject to the emission monitoring requirements of 40 CFR 60.48b if the owner or operator obtains fuel receipts, as described in 40 CFR 60.49b(r) and as specified by the EPA. Otherwise, the permittee shall comply with the emission monitoring requirements for SO₂ as required by 40 CFR 60.47b.

[PTC Condition, Proposed]

3.21.2 When combusting fuel oil other than very low sulfur oil, the owner or operator shall comply with (1) or (2) below:

(1) In accordance with 40 CFR 60.48b(k), install, calibrate, maintain, and operate a continuous emission monitoring system (CEMS) for PM emissions as specified in 40 CFR 60.46b(j), and shall record the output of the CEMS. The PM CEMS shall be operated and data recorded during all periods of operation of the affected facility except during CEMS breakdowns and repairs. Data shall be recorded during calibration checks and zero and span adjustments.

(2) Use an alternative method approved by the EPA per 60.13(h)(i)(1). The owner or operator shall maintain records as specified in the approved alternative method.

[PTC Condition, Proposed]

3.22 Continuous Monitoring System for NO_x - NSPS

In accordance with 60.48b(g), to measure NO_x emissions the permittee shall either: comply with the provisions of 40 CFR 60.48b(b) through 60.48b(f), as given below, or monitor steam generating unit operating conditions and predict NO_x emission rates as specified in a plan submitted pursuant to 40 CFR 60.49b(c).

3.22.1 Except as provided under paragraphs 40 CFR 60.48b(g), the owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous monitoring system, and record the output of the system, for measuring nitrogen oxides emissions discharged to the atmosphere in accordance with 40 CFR 60.48b(b)(1).

3.22.2 The continuous monitoring system required under 40 CFR 60.48b(b)(1) shall be operated and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments in accordance with 40 CFR 60.48b(c).

3.22.3 The one-hour average NO_x emission rates measured by the continuous NO_x monitor required by 40 CFR 60.48b(b) and required under 40 CFR 60.13(h) shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates under 40 CFR 60.44b. The one-hour averages shall

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: T2-060510**Permittee:** RDO Processing, LLC**Location:** Dubois, Idaho**Facility ID No.:** 033-00002

be calculated using the data points required under 40 CFR 60.13(b). At least two data points must be used to calculate each one-hour average in accordance with 40 CFR 60.48b(d).

3.22.4 The procedures under 40 CFR 60.13 shall be followed for installation, evaluation, and operation of the continuous monitoring systems. The span value for NO_x shall be 500 ppm in accordance with 40 CFR 60.48b(e).

3.22.5 When NO_x emission data are not obtained because of continuous monitoring system breakdowns, repairs, calibration checks and zero and span adjustments, emission data will be obtained by using standby monitoring systems, Method 7, Method 7A, or other approved reference methods to provide emission data for a minimum of 75% of the operating hours in each steam generating unit operating day, in at least 22 out of 30 successive steam generating unit operating days in accordance with 40 CFR 60.48b(f).

[PTC Condition]

3.23 NO_x Monitoring Records - NSPS

The owner or operator of an affected facility subject to the NO_x standards under 40 CFR 60.44b shall maintain records of the following information for each steam generating unit operating day in accordance with 40 CFR 60.49b(g):

- (1) Calendar date.
- (2) The average hourly NO_x emission rates (expressed as NO₂) (lb/MMBtu or ng/J heat input) measured or predicted.
- (3) The 30-day average NO_x emission rates (lb/MMBtu or ng/J heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly NO_x emission rates for the preceding 30 steam generating unit operating days.
- (4) Identification of the steam generating unit operating days when the calculated 30-day average NO_x emission rates are in excess of the NO_x emissions standards under 40 CFR 60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken.
- (5) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.
- (6) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.
- (7) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.
- (8) Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.
- (9) Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specification 2 or 3.
- (10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1.

[PTC Condition]

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: T2-060510**Permittee:** RDO Processing, LLC**Location:** Dubois, Idaho**Facility ID No.:** 033-00002**3.24 SO₂ Compliance and Performance Tests - NSPS**

- 3.24.1 In accordance with 40 CFR 60.45b(j), the owner or operator of an affected facility that combusts very low sulfur oil is not subject to the compliance and performance testing requirements of 40 CFR 60.45b if the owner or operator obtains fuel receipts. The fuel receipts shall be obtained as described in 40 CFR 60.49b(r) and as specified by the EPA. Otherwise, the permittee shall comply with the compliance and performance test methods and procedures for SO₂ specified in 40 CFR 60.45b by complying with the requirements of 40 CFR 60.45b(b), 60.45b(c), 60.45b(f), 60.45b(g), and 60.45b(h).

[PTC Condition]

- 3.24.2 When combusting fuel oil other than very low sulfur oil, the owner or operator shall comply with 40 CFR 60.45b(a), (b), (c), (f), (g), (h), and (i).

[PTC Condition, Proposed]**3.25 Opacity Compliance and Performance Tests – NSPS – Initial Performance Test**

To determine compliance with the opacity limits under 40 CFR 60.43b, the owner or operator of an affected facility shall conduct an initial performance test as required under 40 CFR 60.8 using Method 9 to determine the opacity of stack emissions in accordance with 40 CFR 60.46b(d) and 60.46b(d)(7). This requirement applies when fuel oil is fired in Boiler No. 1 and it does not apply when only natural gas and propane are fired in the boiler.

[PTC Condition]**3.26 NO_x Compliance and Performance Tests - NSPS**

In accordance with 40 CFR 60.46b(c) and 60.46b(e), to determine compliance with the emission limits for NO_x required under 40 CFR 60.44b, the owner or operator of an affected facility shall conduct the performance test as required under 40 CFR 60.8 using the continuous system for monitoring NO_x under 40 CFR 60.48(b).

- 3.26.1 For the initial compliance test, NO_x from the steam generating unit is monitored for 30 successive steam generating unit operating days and the 30-day average emission rate is used to determine compliance with the NO_x emission standards under 40 CFR 60.44b. The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period in accordance with 40 CFR 60.46b(e)(1).
- 3.26.2 Following the date on which the initial performance test is completed or is required to be completed under 40 CFR 60.8, whichever date comes first, the owner or operator of an affected facility which combusts *residual oil having a nitrogen content greater than 0.30 weight percent* shall comply with 40 CFR 60.46b(e)(2).
- 3.26.3 Following the date on which the initial performance test is completed or required to be completed under 40 CFR 60.8, whichever date comes first, the owner or operator of an affected facility which has a heat input capacity of 73 MW (250 million Btu/hour) or less and which combusts natural gas, distillate oil, or *residual oil having a nitrogen content of 0.30 weight percent or less* shall *upon request* determine compliance with the NO_x standards under 40 CFR 60.44b through the use of a 30-day performance test. During periods when performance tests are not requested, NO_x emissions data collected pursuant to 40 CFR 60.48b(g)(1) or 60.48b(g)(2) are used to calculate a 30-day rolling average emission rate on a daily basis and used to prepare excess emission reports, but will not be used to determine compliance with the

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: T2-060510**Permittee:** RDO Processing, LLC**Location:** Dubois, Idaho**Facility ID No.:** 033-00002

NO_x emission standards. A new 30-day rolling average emission rate is calculated each steam generating unit operating day as the average of all of the hourly NO_x emission data for the preceding 30 steam generating unit operating days in accordance with 40 CFR 60.46b(e)(4).

- 3.26.4 If the owner or operator of an affected facility which combusts residual oil does not sample and analyze the residual oil for nitrogen content, as specified in 40 CFR 60.49b(e), the requirements of 40 CFR 60.46b(e)(2) apply and the provisions of 40 CFR 60.46b(e)(4) are inapplicable in accordance with 40 CFR 60.46b(e)(5).

[PTC Condition]**3.27 PM Performance Test**

Each year prior to January 13th the permittee shall conduct a performance test to measure PM emissions from Boiler No. 1 stack, when firing No. 6 fuel oil, to demonstrate compliance with the PM emission limits in Permit Condition 2.11. The test shall be conducted in accordance with the procedures outlined in 40 CFR 60, Appendix A, Method 5, or a DEQ-approved alternative. The initial performance test, and any subsequent performance tests conducted to demonstrate compliance, shall be performed in accordance with IDAPA 58.01.01.157, Section 2 of this permit. In addition, the following information shall be recorded during each performance test run and included in the performance test report:

- Boiler No. 1 shall be operated at the worst case normal production rate during the performance test. A description of how this requirement was met shall be included in the performance test report.
- Visible emissions shall be observed and recorded using the methods specified in IDAPA 58.01.01.625.
- The fuel throughput shall be recorded (e.g. gal/hr for oil or propane and cubic feet/hr for natural gas).
- The average steam production rate of Boiler No. 1 shall be recorded in pounds per hour and pounds per square inch.

After the initial performance test, future testing shall be performed according to the following schedule. If the PM emission rate measured in the most recent test is less than or equal to 75% of the emission standard in Permit Condition 2.11, the next test shall be conducted within five years of the test date. If the PM emission rate measured during the most recent performance test is greater than 75%, but less than or equal to 90%, of the emission standard in Permit Condition 2.11, the next test shall be conducted within two years of the test date. If the PM emission rate measured during the most recent performance test is greater than 90% of the emission standard in Permit Condition 2.11, the next test shall be conducted within one year of the test date.

[PTC Condition]**3.28 Records Retention - NSPS**

All records required under 40 CFR 60.40b through 60.49b shall be maintained by the owner or operator of the affected facility for a period of five years following the date of such record, in accordance with General Provision No. 7 of this permit, to comply with 40 CFR 60.49b(o).

[PTC Condition]

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: T2-060510**Permittee:** RDO Processing, LLC**Location:** Dubois, Idaho**Facility ID No.:** 033-00002***Reporting Requirements*****3.29 Initial Startup Report - NSPS**

The permittee shall submit notification of the date of initial startup, as provided by 40 CFR 60.7. This notification shall include the information described by 40 CFR 60.49b(a).

[PTC Condition]**3.30 Initial Performance Test and CEMS Evaluation Reports - NSPS**

The owner or operator of each affected facility subject to the SO₂, PM, and/or NO_x emission limits under 40 CFR 60.42b, 60.43b, and 60.44b shall submit to the EPA Administrator the performance test data from the initial performance test and the performance evaluation of the CEMS using the applicable performance specifications in 40 CFR 60, Appendix B, in accordance with 40 CFR 60.49b(b). A copy of this information shall also be sent to DEQ at the address given in Section 2 of this permit. Applicability of this permit condition with regard to SO₂ shall be determined in accordance with Permit Condition 3.24.

[PTC Condition]**3.31 NO_x Predictive Emissions Monitoring System Plan - NSPS**

If the permittee seeks to demonstrate compliance with the standards of 40 CFR 60.44b through the monitoring of steam generating unit operating conditions under the provisions of 40 CFR 60.48b(g)(2), the following action shall be taken. The permittee shall submit to DEQ for approval a plan that identifies the operating conditions to be monitored under 40 CFR 60.48b(g)(2) and the records to be maintained under 40 CFR 60.49b(j). This plan shall be submitted to DEQ for approval within 360 days of the initial startup of the affected facility. The plan shall be submitted in accordance with 40 CFR 60.49b(c).

[PTC Condition, Proposed]**3.32 Excess Emission Reports - NSPS**

The owner or operator of any affected facility in any category listed in paragraphs (1) or (2) below is required to submit excess emission reports for any excess emissions which occurred during the reporting period in accordance with 40 CFR 60.49b(h).

- (1) Any affected facility subject to the opacity standards under 40 CFR 60.43b(e) or to the operating parameter monitoring requirements under 40 CFR 60.13(i)(1). This requirement applies when fuel oil is fired in the boiler and it does not apply when only natural gas and propane are fired in the boiler.
- (2) Any affected facility that is subject to the NO_x standard of 40 CFR 60.44b, and that
 - (i) Combusts natural gas, distillate oil, or residual oil with a nitrogen content of 0.3 weight percent or less, or
 - (ii) Has a heat input capacity of 73 MW (250 million Btu/hour) or less and is required to monitor NO_x emissions on a continuous basis under 40 CFR 60.48b(g)(1) or steam generating unit operating conditions under 40 CFR 60.48b(g)(2).
- (3) For the purpose of 40 CFR 60.43b, excess emissions are defined as all six-minute periods during which the average opacity exceeds the opacity standards under 40 CFR 60.43b(f). This requirement

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: T2-060510**Permittee:** RDO Processing, LLC**Location:** Dubois, Idaho**Facility ID No.:** 033-00002

applies when fuel oil is fired in the boiler and it does not apply when only natural gas and propane are fired in Boiler No. 1.

- (4) For purposes of 40 CFR 60.48b(g)(1), excess emissions are defined as any calculated 30-day rolling average NO_x emission rate, as determined under 40 CFR 60.46b(e), which exceeds the applicable emission limits in 40 CFR 60.44b.

[PTC Condition]**3.33 NO_x Continuous Monitoring Reports - NSPS**

In accordance with 40 CFR 60.49b(i), the owner or operator of any affected facility subject to the continuous monitoring requirements for NO_x under 40 CFR 60.48(b) shall submit reports containing the information recorded under 40 CFR 60.49b(g).

[PTC Condition]**3.34 SO₂ Reports - NSPS**

The owner or operator of any affected facility subject to the SO₂ standards under 40 CFR 60.42b, as specified by the EPA, shall submit reports in accordance with 40 CFR 60.49b(j), as specified below:

- 3.34.1 If the affected facility is subject to the compliance and performance testing requirements of 40 CFR 60.45b and the reporting requirement in 40 CFR 60.49b(j), the information described in 40 CFR 60.49b(k) shall be reported to the EPA Administrator and DEQ.
- 3.34.2 If the affected facility is subject to the sulfur dioxide monitoring requirements under 40 CFR 60.47b and the minimum amount of data required under 40 CFR 60.47b(f) were not obtained during the reporting period, the following information is reported, in accordance with 40 CFR 60.49b(m), to the EPA Administrator and DEQ in addition to that required under 40 CFR 60.49b(k):
- (1) The number of hourly averages available for outlet emission rates and inlet emission rates.
 - (2) The standard deviation of hourly averages for outlet emission rates and inlet emission rates, as determined in Method 19, Section 7.
 - (3) The lower confidence limit for the mean outlet emission rate and the upper confidence limit for the mean inlet emission rate, as calculated in Method 19, Section 7.
 - (4) The ratio of the lower confidence limit for the mean outlet emission rate and the allowable emission rate, as determined in Method 19, Section 7.

[PTC Condition]**3.35 Fuel Receipts - NSPS**

If the permittee elects to demonstrate that the affected facility combusts only very low sulfur oil under 40 CFR 60.42b(j)(2), reports shall be submitted to the EPA Administrator and DEQ certifying that only very low sulfur oil meeting the definition described in 40 CFR 60.49b(r) was combusted in the affected facility during the reporting period, in accordance with 40 CFR 60.49b(r) and as specified by the EPA.

[PTC Condition]

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: T2-060510**Permittee:** RDO Processing, LLC**Location:** Dubois, Idaho**Facility ID No.:** 033-00002**3.36 Electronic Reporting - NSPS**

The owner or operator of an affected facility may submit electronic quarterly reports for SO₂ and/or NO_x and/or opacity in lieu of submitting the written reports required under paragraphs (h), (i), (j), or (k) of 40 CFR 60.49b. The format of each quarterly electronic report shall be coordinated with the permitting authority (i.e., the EPA). The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement from the owner or operator, indicating whether compliance with the applicable emission standards and minimum data requirements of 40 CFR Part 60 Subpart Db was achieved during the reporting period. Before submitting reports in the electronic format, the owner or operator shall coordinate with the permitting authority to obtain their agreement to submit reports in this alternative format in accordance with 40 CFR 60.49b(v).

[PTC Condition]**3.37 Reporting Period - NSPS**

The reporting period for the reports required under 40 CFR Part 60 Subpart Db is each six-month period. All reports shall be submitted to the EPA Administrator and DEQ and shall be postmarked by the 30th day following the end of the reporting period in accordance with 40 CFR 60.49b(w).

[PTC Condition]***NSPS General Provisions*****3.38 NSPS General Provisions**

The permittee shall comply with the General Provisions under 40 CFR Part 60 Subpart A for the Boiler.

[PTC Condition]

- 3.39 All requests, reports, applications, submittals, and other communications to the Administrator pursuant to 40 CFR 60 shall be submitted in duplicate to the appropriate Regional Office of the EPA, to the attention of the Director of the Division in accordance with 40 CFR 60.4, as given below. Copies of all information required to be submitted to the EPA for applicable NSPS requirements, shall also be submitted to DEQ at the address given in Section 2 of this permit.

EPA Region 10
Director, Air and Waste Management Division
1200 Sixth Ave.
Seattle, WA 98101

[PTC Condition]

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: T2-060510**Permittee:** RDO Processing, LLC**Location:** Dubois, Idaho**Facility ID No.:** 033-00002**4. BOILER NO. 2, SUPERIOR BOILER WORKS****4.1 Process Description**

A 6.7 MMBtu/hr Superior Boiler Works, Inc., boiler (Boiler No. 2) produces hot water and steam for the production of dehydrated potato products which includes hot water for the agglomerated product line, steam for the Ryan's line, and steam for several production lines while the plant during facility shutdown. Boiler No. 2 does not utilize any air pollution control equipment and is not an affected facility under the New Source Performance Standards (NSPS) of 40 CFR Part 60 Subpart Dc due to its size. Boiler No. 2 is fueled by natural gas.

[PTC Condition]***Emissions Limits*****4.2 Visible Emissions**

The permittee shall not discharge any air pollutant to the atmosphere from any point of emission for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625. These provisions shall not apply when the presence of uncombined water, NO_x, and/or chlorine gas is the only reason for the failure of the emission to comply with the requirements of this section.

[PTC Condition]**4.3 Grain Loading**

The permittee shall not discharge PM to the atmosphere from any fuel-burning equipment in excess of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume for gas in accordance with IDAPA 58.01.01.676.

[PTC Condition]***Monitoring and Recordkeeping Requirements*****4.4 Visible Emissions**

The permittee shall demonstrate compliance with visible emissions limitation specified in Permit Condition 4.2 using the methods specified in Permit Condition 2.8.

[PTC Condition]

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: T2-060510

Permittee: RDO Processing, LLC

Location: Dubois, Idaho

Facility ID No.: 033-00002

5. DRYER PROCESSES AND MATERIAL TRANSFER SYSTEMS

5.1 Process Description

The RDO Processing, LLC, is a potato processing company. The overall process primarily involves potato dehydration to make potato flakes. The processes addressed by this section are listed in Table 5.1 and this includes dryers, dehydration lines and material transfer systems. Emissions from each of these sources are uncontrolled except for the Flake Packaging material transfer systems which are controlled by baghouses.

Table 5.1 EMISSIONS UNIT DESCRIPTIONS

Emissions Unit(s) / Process(es)	Emissions Control Device	Emissions Point
Dryer, Maxon, fluidized bed type	None	FLD DYR
Dryer, National, belt type with Stages A1, A2, B, and C	None	NAT_A1, NAT_A2, NAT_B, NAT_C
Dryer, Flaker/Drum type, Nos. 1-12	None	Drum1 through Drum12
Flake Packaging Bulk Line	Baghouse, Micropulsair	FP_Bulk
Flake Packaging Line	Baghouse, Micropulsair	FP
Flake Packaging Torit Line	Baghouse, Torit	FP_TOR
Flake Packaging Drum Negative Air Baghouse	Baghouse, Nol-Tech	FP_BH
Cyclone, agglomerated product	None	CYCLONE

Emissions Limits

5.2 PM₁₀ Emission Limits

Emissions of PM₁₀ from the dryers and the Flake Packaging Torit Line stacks shall not exceed any corresponding emissions rate limits listed in the following table.

Table 5.2 DRYER PROCESS AND MATERIAL TRANSFER SYSTEM EMISSIONS LIMITS

Source Description	PM ₁₀ (lb/day)
Dryer, Maxon, fluidized bed type	84.72
Dryer, National, belt type; combined emissions from Stages A1, A2, B, and C	44.16
Dryer, Flaker/Drum type; combined emissions from Dryer Nos. 1-12	561.6
Flake Packaging Torit Line	1.92

[PTC Condition, Proposed]

5.3 SO₂ Emission Limits

Emissions of SO₂ from all production processes, excluding Boiler No. 1, shall not exceed three tons per year based on any consecutive 12-month period.

[PTC Condition]

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: T2-060510

Permittee: RDO Processing, LLC

Location: Dubois, Idaho

Facility ID No.: 033-00002

Operating Requirements

5.4 Throughput

5.4.1 Flaker/Drum, Fluidized Bed, and National Dryers

The combined total output from the all 12 Flaker/Drum dryers, the fluidized bed dryer, and the National Dryer shall not exceed a rate of 516,000 pounds per day.

[PTC Condition, Proposed]

5.4.2 Cyclone, Agglomerated Product

The total throughput of the agglomerated product cyclone shall be limited to 42,000 pounds per day.

[PTC Condition]

5.5 Material Transfer System Control Equipment

The permittee shall operate and maintain a baghouse to control PM emissions from each of the following: Flake Packaging Line, Flake Packaging Bulk Line, Flake Packaging Torit Line, and the Flake Packaging Drum Negative Air Baghouse Line. The pressure drop across each baghouse shall be maintained within manufacturer's and O&M manual specifications.

[PTC Condition]

5.6 Baghouse Pressure Drop

The permittee shall install, calibrate, maintain, and operate pressure drop monitoring devices that measure the pressure differential across the baghouse for each of the following: Flake Packaging Line, Flake Packaging Bulk Line, Flake Packaging Torit Line, and the Flake Packaging Drum Negative Air Baghouse Line.

[PTC Condition]

5.7 Burner Fuels

Each dryer, and propane heaters No. 1, 2, and 3, shall combust only natural gas or propane.

[PTC Condition]

Monitoring and Recordkeeping Requirements

5.8 Throughput

5.8.1 Flaker/Drum, Fluidized Bed, and National Dryers

When in operation, the permittee shall monitor and record, on a daily basis, the calendar date and the combined total daily output, in pounds per day, from all 12 Flaker/Drum Dryers, the Fluidized Bed Dryer, and the National Dryer.

[PTC Condition]

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: T2-060510**Permittee:** RDO Processing, LLC**Location:** Dubois, Idaho**Facility ID No.:** 033-00002**5.8.2 Cyclone, Agglomerated Product**

When in operation, the permittee shall monitor and record, on a daily basis, the calendar date and the total daily cyclone material throughput, in pounds per day.

[PTC Condition]**5.9 Baghouse Pressure Drop**

When in operation, the permittee shall monitor and record the pressure drops across each baghouse for the Flake Packaging Line, Flake Packaging Bulk Line, Flake Packaging Torit Line, and the Flake Packaging Drum Negative Air Baghouse Line on a daily basis.

[PTC Condition]**5.10 Baghouse O & M Manual**

The permittee shall have an O&M manual for the air pollution control equipment of the Flake Packaging Line, Flake Packaging Bulk Line, Flake Packaging Torit Line, and the Flake Packaging Drum Negative Air Baghouse Line. The manual shall incorporate procedures and information to demonstrate that the control equipment is operated as described in the permit application and as required under General Provision 2. At a minimum the following items shall be addressed in the manual:

- The contents of the O&M manual shall be based on manufacturer's information to the extent this is practical. When the manufacturers information is not used (e.g., information obtained from a performance test), this should be explained in the manual.
- List the manufacturer's recommended minimum and maximum pressure drops for each baghouse.
- For each baghouse, include an inspection checklist which lists items that will be periodically inspected while the system is operating (e.g.: condition of the air pulse system or mechanical shaker system such as hoses, air valves, linkages, timers, switches, etc; condition of the structure and sheet metal such as cracks, leaks, seal problems, etc.; etc.). Describe how often these operational inspections will be performed. These inspections should be done at least monthly.
- For each baghouse, include an inspection checklist which lists items that will be inspected when the baghouse is taken out of operation and physically opened for inspection (e.g., items listed in the operational checklist plus condition of bags, bag supports, bag attachment hardware, internal pulse system or shaker hardware, sheet metal cracks, etc.). Describe how often these internal inspections are projected to occur.
- Describe periodic planned maintenance.

A copy of the initial O&M manual, and any subsequent revisions, shall be submitted to DEQ.

[PTC Condition]

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: T2-060510

Permittee:	RDO Processing, LLC	Facility ID No.: 033-00002
Location:	Dubois, Idaho	

6. SUMMARY OF EMISSION RATE LIMITS

Table 6.1 provides a summary of all emission rate limits required by this permit.

Table 6.1 SUMMARY OF EMISSION RATE LIMITS

RDO Processing, LLC, Dubois Emissions Limits ^a – Hourly (lb/hr) and Annual ^b (T/yr)			
Source Description	PM ₁₀ ^c	SO ₂	
	lb/day	lb/day	T/yr
Boiler No. 1, Nebraska Boiler ^d	108	549	--- ^e
Dryer, Maxon, fluidized bed type	84.72	---	---
Dryer, National, belt type; combined emissions from Stages A1, A2, B, and C	44.16	---	---
Dryer, Flaker/Drum type; combined emissions from Dryer Nos. 1-12	561.6	---	---
Flake Packaging Torit Line	1.92	---	---
All production processes, excluding the Boiler	---	---	3
TOTAL	---	---	---

^a As determined by a pollutant-specific EPA reference method, DEQ-approved alternative, or as determined by DEQ's emissions estimation methods used in the permit analysis.

^b As determined by multiplying the actual or allowable (if actual is not available) pound per hour emission rate by the allowable hours per year that the process(es) may operate(s), or by actual annual production rates.

^c Includes condensable PM.

^d Refer to Section 3 of this permit to see the NSPS emission limits for the Boiler.

^e The 549 lb/day limit is based on 24-hr/day operation. Modeling was based on 8,760 hrs per year operation, which would result in annual emissions of 100.2 tons of SO₂ per year.

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: T2-060510

Permittee: RDO Processing, LLC

Location: Dubois, Idaho

Facility ID No.: 033-00002

7. PERMIT TO CONSTRUCT AND TIER II PERMIT TO OPERATE GENERAL PROVISIONS

General Compliance

1. The permittee has a continuing duty to comply with all terms and conditions of this permit. All emissions authorized herein shall be consistent with the terms and conditions of this permit and the Rules for the Control of Air Pollution in Idaho. The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit, the Rules for the Control of Air Pollution in Idaho, and the Environmental Protection and Health Act.

[Idaho Code §39-101, et seq.]

2. The permittee shall at all times (except as provided in the Rules for the Control of Air Pollution in Idaho) maintain in good working order and operate as efficiently as practicable, all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable Idaho laws for the control of air pollution.

[IDAPA 58.01.01.211, 405, 5/1/94]

3. Nothing in this permit is intended to relieve or exempt the permittee from the responsibility to comply with all applicable local, state, or federal statutes, rules and regulations.

[IDAPA 58.01.01.212.01, 406, 5/1/94]

Inspection and Entry

4. Upon presentation of credentials, the permittee shall allow DEQ or an authorized representative of DEQ to do the following:
 - a. Enter upon the permittee's premises where a Tier I source is located or emissions related activity is conducted, or where records are kept under conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that are kept under the conditions of this permit;
 - c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d. As authorized by the Idaho Environmental Protection and Health Act, sample or monitor, at reasonable times, substances or parameters for the purpose of determining or ensuring compliance with this permit or applicable requirements.

[Idaho Code §39-108]

Construction and Operation Notification

5. The permittee shall furnish DEQ written notifications as follows in accordance with IDAPA 58.01.01.211:
 - a. A notification of the date of initiation of construction, within five working days after occurrence;

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: T2-060510**Permittee:** RDO Processing, LLC**Location:** Dubois, Idaho**Facility ID No.:** 033-00002

- b. A notification of the date of any suspension of construction, if such suspension lasts for one year or more;
- c. A notification of the anticipated date of initial start-up of the stationary source or facility not more than sixty days or less than thirty days prior to such date;
- d. A notification of the actual date of initial start-up of the stationary source or facility within fifteen days after such date; and
- e. A notification of the initial date of achieving the maximum production rate, within five working days after occurrence - production rate and date.

[IDAPA 58.01.01.211, 5/1/94]***Performance Testing***

6. If performance testing (air emissions source test) is required by this permit, the permittee shall provide notice of intent to test to DEQ at least 15 days prior to the scheduled test date or shorter time period as approved by DEQ. DEQ may, at its option, have an observer present at any emissions tests conducted on a source. DEQ requests that such testing not be performed on weekends or state holidays.

All performance testing shall be conducted in accordance with the procedures in IDAPA 58.01.01.157. Without prior DEQ approval, any alternative testing is conducted solely at the permittee's risk. If the permittee fails to obtain prior written approval by DEQ for any testing deviations, DEQ may determine that the testing does not satisfy the testing requirements. Therefore, at least 30 days prior to conducting any performance test, the permittee is encouraged to submit a performance test protocol to DEQ for approval. The written protocol shall include a description of the test method(s) to be used, an explanation of any or unusual circumstances regarding the proposed test, and the proposed test schedule for conducting and reporting the test.

Within 30 days following the date in which a performance test required by this permit is concluded, the permittee shall submit to DEQ a performance test report. The written report shall include a description of the process, identification of the test method(s) used, equipment used, all process operating data collected during the test period, and test results, as well as raw test data and associated documentation, including any approved test protocol.

[IDAPA 58.01.01.157, 4/5/00]***Monitoring and Recordkeeping***

7. The permittee shall maintain sufficient records to ensure compliance with all of the terms and conditions of this permit. Records of monitoring information shall include, but not be limited to the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation and copies of all reports required by this permit. All records required to be maintained by this permit shall be made available in either hard copy or electronic format to DEQ representatives upon request.

[IDAPA 58.01.01.211, 405, 5/1/94]

AIR QUALITY TIER II OPERATING PERMIT AND PERMIT TO CONSTRUCT NO.: T2-060510

Permittee: RDO Processing, LLC

Location: Dubois, Idaho

Facility ID No.: 033-00002

Excess Emissions

8. The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions due to startup, shutdown, scheduled maintenance, safety measures, upsets and breakdowns.
[IDAPA 58.01.01.130-136, 4/5/00]

Certification

9. All documents submitted to DEQ, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certification shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete.
[IDAPA 58.01.01.123, 5/1/94]

False Statements

10. No person shall knowingly make any false statement, representation, or certification in any form, notice, or report required under this permit, or any applicable rule or order in force pursuant thereto.
[IDAPA 58.01.01.125, 3/23/98]

Tampering

11. No person shall knowingly render inaccurate any monitoring device or method required under this permit or any applicable rule or order in force pursuant thereto.
[IDAPA 58.01.01.126, 3/23/98]

Expiration and Renewal

12. This permit shall be renewable on the expiration date, provided the permittee submits an application for renewal to the Department and continues to meet all terms and conditions contained in the permit. The expiration of this permit will not affect the operation of the stationary source or facility during the administrative procedure period associated with the permit renewal process.
[IDAPA 58.01.01.209.04, 7/1/02]

Transferability

13. This permit is transferable in accordance with procedures listed in IDAPA 58.01.01.209.06 and 404.05.
[IDAPA 58.01.01.209.06, 404.05, 4/11/06]

Severability

14. The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.